

DOCUMENT RESUME

ED 302 936

EA 020 623

AUTHOR Marx, Fern
TITLE The Role of Day Care in Serving the Needs of School-Age Parents and Their Children: A Review of the Literature. Working Paper No. 174.
INSTITUTION Wellesley Coll., Mass. Center for Research on Women.
SPONS AGENCY Ford Foundation, New York, N.Y.; Mott (C.S.) Foundation, Flint, Mich.; Women's Educational Equity Act Program (ED), Washington, DC.
PUB DATE 87
NOTE 25p.; For related document, see EA 020 624.
AVAILABLE FROM Center for Research on Women, Wellesley College, Wellesley, MA 02181 (\$3.50).
PUB TYPE Information Analyses (070)
EDRS PRICE MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS Ancillary School Services; Child Caregivers; *Day Care; *Early Parenthood; Elementary Secondary Education; Family Day Care; Family Planning; *Parenthood Education; *Pregnant Students; Program Descriptions; Social Services; Surveys; Transitional Programs; *Unwed Mothers

ABSTRACT

The recent rise in premarital sexual experience and in pregnancy and births among unmarried teenage women from all socioeconomic groups has focused public, professional, and governmental attention on the immediate and long-term implications of teenage pregnancy. The assumption underlying the need for adolescent parent programs in general is that if a young mother is to improve her prospects, she must continue her education, vocational training, or work experience, and delay subsequent births. This document, therefore, reviews the literature on the socioeconomic, medical, and psychological consequences of teenage pregnancy and on the role of day care in serving the needs of school-age parents and their children. First, national surveys, interview studies, and research and reports on service programs are reviewed that support the need for day care and other services to young parents. Next, several new approaches to serving the needs of adolescent parents are reviewed, including the Comprehensive Employment and Training Act (CETA), Project Redirection, school-based programs, and interdistrict programs such as the Family Learning Center in Michigan. Taken together, these national, and local programs and program studies substantiate both the need for and the efficacy of child care as a support service that can improve the life outcomes of both the adolescent mother and her child. Successful programs agree that the necessary components for comprehensive service delivery include education, employment, health and fertility control, and parenting and child development. A bibliography is included. (TE)

* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *

Although adolescent pregnancy and childbearing are long-standing phenomena, they have been of increasing concern during the past two decades. The rise in premarital sexual experience and in pregnancy and births among unmarried teenage women from all sociodemographic groups has focused public, professional, and governmental attention on the immediate sequelae and long-term implications of these behaviors for the individual and society.

While some adolescents who become pregnant and carry to term manage to escape the negative consequences associated with early childbearing, studies have consistently shown that for many, early pregnancy and parenthood sets in motion a cycle which results (directly or indirectly) in reduced career opportunities, welfare dependency, disruptions in family relationships and to the normal process of adolescent development (Card and Wise, 1978). In addition, research suggests that the negative social and economic impact of an early birth on parents can directly affect their offsprings' short and long-term health and cognitive development and psychosocial adjustment (Hoffreth, 1987; Campbell et al, 1986; Zuckerman et al, 1984; Kinard and Klerman, 1983; Baldwin and Cain, 1980). Perhaps even more alarming is evidence which points to an intergenerational cycle of families headed by adolescents (Moore et al, 1981).

In a follow-up study of women who had participated in the National Collaborative Perinatal Project, Broman (1981) found a number of negative effects associated with teenage parenthood. Several years after birth, these women were still more poorly educated than those who had delayed childbearing, and more were unmarried and living on public assistance. At age 7, their children were more often living in foster or adoptive homes. Although biological deficit was not associated with this sample of teen mothers, all of

whom received some prenatal care, the adverse effects of environmental disadvantage were evident in the lower intelligence and school performance of the children of adolescent mothers. Broman concludes that based on evidence from this and other studies, support systems for teen parents should focus on enabling young mothers to continue their education and on providing supplementary stimulation programs for the children.

A research review by Zuckerman et al (1984) points to the heavy medical, developmental and social burden of adolescent childbearing. Morbidity among infants of adolescent mothers includes prematurity and low birth weight, decreased rates of growth during childhood, low IQ, suboptimal school achievement, disordered behavior, and interactional difficulties between mother and child. The review points out that the physical health of the newborn infant can profoundly influence the initial adjustment between mother and child. Poor infant outcomes may adversely effect the evolution of reciprocity between mothers and their infants and imperil the developmental outcomes of these infants. Adolescent caretaking behaviors may have adverse effects on the child's development because of inadequate nutrition, stimulation and interaction. Adolescent mothers also demonstrate less realistic developmental expectations and less adaptive childbearing practices. There are some indications that the children of adolescent mothers may be at increased risk for physical abuse later in life. Lower intellectual ability has been reported in the children of adolescent mothers at 8 months of age, 4 years and 7 years in comparison with matched samples. Data on young adults who were born to adolescent parents show that they continue to perform poorly on cognitive tests throughout high school and have lower educational

aspirations. The increased incidence of childhood behavior problems during the early school years has also been noted.

None of these findings have definitely shown that maternal age is the critical variable in determining psychosocial or intellectual outcomes in the children of teen mothers. However, the economic disadvantages commonly associated with early pregnancy may increase the risks of family dysfunction and act synergistically with maternal age to produce negative outcomes through lower maternal education, which has been consistently shown to have a negative impact on the intelligence and achievement of children. Among single teen mothers, the absence of the father or other family members as a mediating influence or lack of alternative supports such as day care may also be negatively associated with later child abuse and poor cognitive and academic outcomes.

Hoffreth (1987) in a review of the literature on the children of teen child bearers arrives at similar conclusions. Having a young parent according to this report is harmful to children. While there are only small direct effects noted in the studies cited, there are larger indirect effects, which vary among female children and by race, due to lower maternal educational achievement, less stable family structure, lower family socioeconomic status, and larger family size.

These concerns have encouraged the development of innovative medical, educational, and counseling strategies designed to prevent or ameliorate the consequences of adolescent pregnancy. Most medical, social service and educational programs, however, have concentrated on the prenatal and early postpartum period frequently ending just at the point when the adolescent parent may require the most help in coping with the difficulties of her new

role and responsibilities. The transition to motherhood can be an overwhelming experience for many adolescents, particularly for those with limited parental support. The availability of support services in the extended postpartum period may make a critical difference in the young mother's ability to pursue a rewarding and productive life. Several researchers in the field (Klerman, 1981; Furstenberg, 1976) have suggested that the absence of services to young parents in the two to three years following delivery may lessen the effectiveness of prenatal programs.

Recent studies indicate that community programs which offer comprehensive medical, social and educational services both prenatally and postpartum, and regular follow-up contacts with the new parent and child for up to three years postpartum, appear to have a greater impact on educational attainment, the acquisition of vocational skills, the delay of subsequent births, and economic self-sufficiency than programs which predominantly concentrate on prenatal services, or limited postpartum care (Project Redirection, 1982; Hardy et al, 1981; Cartoof, 1978, 1979; OAPP, 1981). These studies also suggest that the preventive aspects of such programs extend beyond reducing subsequent pregnancy, poor birth outcomes, welfare dependency, and school drop-out rates; they may also enhance positive health, intellectual and psychosocial development in the adolescents' offspring (Hoffreth, 1987; Campbell et al, 1986; Kinard and Klerman, 1983; Badger, 1981; Field, 1981).

Despite the expansion of adolescent postpartum service programs during the past decade, few studies are available which evaluate the appropriateness of different intervention strategies for specific subpopulations (Klerman, 1981, 1979; Brown, 1980) and only a small number provide information about the one service which has been repeatedly identified as crucial for the successful

provision of other services, namely day care. Until recently, relatively few programs provided day care services either directly or by referral, and fewer still have evaluated its acceptance and utilization by young parents, its cost effectiveness, or its impact on school age parents' participation in education or vocational training programs. The lack of knowledge of the effects of various interventions on specific populations of young parents means that services, which are always in short supply, may be inappropriately targeted and consequently over or under-utilized. This is particularly cogent in regard to day care for infants and toddlers, which is costly (and thus vulnerable to budget cuts) and in extremely short supply (Wallace, 1982; OAPP, 1981; Goldstein and Wallace, 1978).

The assumption underlying the need for adolescent parent programs in general is that if a young mother is to improve her prospects, it is essential that she continue her education, vocational training, or work experience, and delay subsequent births. It is felt, by many in the field, that a major obstacle faced by young parents trying to complete their education/vocational training or trying to gain work experience is the lack of appropriate, acceptable, and affordable care for their children during the time they are at school, work or in training programs. While some adolescent parents do have child care available within their family network, it has been reported that a significant number of young parents must drop-out of school, training, or work because this service is either unavailable, unacceptable, or too costly (Burt et al, 1984; Wallace, 1982; Zellman, 1981; Presser, 1980, 1979, 1977; Cartoof, 1979; Furstenberg, 1980, 1976).

In addition to the general shortage of organized child care services, many of the programs which do exist may not be well adapted to the special needs of

teenage mothers. For example, to accommodate the schedule of the young mother-student, facilities must open early and be accessible by school bus or public transportation. Because many adolescents are inexperienced in their parenting roles, they require special attention in coordinating child care routines with home care routines, instruction in recognizing health and developmental difficulties in their children, and help in obtaining special services, including health care, social and developmental services when these are required (Klerman, 1983; McGee, 1982).

Support for these assumptions comes from several sources: national surveys on the supply of and need for day care services (Wallace, 1982; OAPP, 1981); local small scale interview studies of adolescent parent needs (AIR, 1979; Family Impact Seminar-Alliance for Young Families, 1980; Clapp and Raab, 1978); and studies of and reports on service programs and research and demonstration projects (New Futures School, 1982; Boston Globe, 1982, Edwards and Arnold, 1982; Cartoof, 1979; Project Redirection, 1982, 1981; Zellman, 1981).

The following section reviews the literature which supports the need for day care and other services to young parents.

Need for Day Care

Direct and indirect evidence of the need for day care services comes from multiple sources. Among these are national surveys, interview studies, and research and reports on service programs.

Surveys

The most recent national survey on the status of services for and the needs of pregnant adolescents in large cities in the United States (Wallace, 1982)

indicated that day care for infants was available significantly less often than most other services on the list provided. Over the decade covered by the three Wallace surveys (Wallace, 1982; Goldstein and Wallace, 1978, 1976) day care was consistently the unmet need most often checked by professional respondents. In addition, the lack of child care was one of the most frequent reasons given by professionals for adolescent parents dropping-out of special programs.

Another survey of services provided by adolescent pregnancy projects (OAPP, 1981) supported Wallace's findings. Day care services were the least available across the entire spectrum of services and this held for all children's age groups (infant, toddler, preschool). Less than two-fifths of the programs surveyed reported that day care services were available either directly or through referral. The survey noted that day care was offered twice as frequently by referral to outside agencies as by the reporting agency itself and this was particularly true for services to the youngest children. The distribution of day care services varied regionally and were found in shortest supply in non-metropolitan areas. A 1986 national survey by the Education Research Group (Weiner, 1987) of school officials found that child care was the least available service provided by respondents' school districts. Personal counseling was provided by 78 percent of the districts; child care was provided by only 11 percent, although 24 percent of respondents indicated that child care was among the most effective programs in serving the needs of teen parents.

Interview Studies

The need for day care services receives further support from surveys of adolescent parents regarding their problems and service need. The AIR (1979)

survey of 100 parents, age 16 to 19 at delivery, in the Boston area identified child care as one of the most important services. Yet affordable and acceptable child care for children under age three was extremely hard to locate. The helping network for these young parents consisted primarily of family members. Over reliance on their families, however, also led to struggles for control of the child. Friends were noticeably lacking. The lack of alternative support networks among this group of young parents made it difficult to set up cooperative arrangements even for occasional child care. For those young parents committed to continuing their education, job training, or work, private child care arrangements were found to be unacceptable, undependable, and frequently too costly.

An interview study by the Family Impact Seminar and the Alliance for Young Families (1980) produced remarkably similar findings to the AIR survey. Over fifty percent of the young parents in this sample lacked consistent child care within their family networks. The majority of respondents viewed this service as essential to their participation in school, vocational training, or work and indicated that they would accept extra-familial child care if it were available, particularly if provided in the high schools. This finding is especially interesting in light of the fact that over fifty percent of these young mothers reported being uncomfortable with a stranger caring for their baby.

Colletta and Gregg (1981), in a study which sought to discover situational and individual variables which modified the emotional stress experienced by adolescent mothers, found that child care arrangements and information was one of the most frequently reported problem area. The most dramatic differences between adolescents who were in school and those who dropped out were found in

the availability of support for child care and child rearing rather than in the desire to return to school (Colletta, et al, 1980). Zellman's study (1981) of school programs found that for the majority of young women interviewed the reality and costs of parenthood were not part of their decision making during pregnancy. Few considered who would care for the child. Some young women dropped out of school because of unsatisfactory child care arrangements, lack of transportation, and inflexible school schedules. Other adolescents were able to make successful transitions back to school postpartum because of parental support which included child care.

Henderson (1980), in a study of the perceptions of thirty school aged mothers, their parents, and school representatives on the consequences of pregnancy and parenthood, found that the most frequently mentioned consequence, and the only one on which there was substantial agreement between the three groups was the constriction of social activities because of the lack of child care. Although only ten percent of the young mothers* reported that they anticipated a delay or prevention of graduation due to lack of child care, Henderson notes that this may be a somewhat unrealistic evaluation of the availability of child care.

Clapp and Raab (1978) in an effort to determine which services would be used by young mothers found that child care was among the most frequently stated need but that the need was dependent on the young woman's living situation. Those living independently required far greater child care resources than those who lived with their parents.

*Sixty-eight percent of the parents interviewed and seventy-nine percent of the school representatives stated that curtailment of education was a consequence of young motherhood.

Programs Providing Day Care

In response to the documented service gaps, several new approaches to serving the needs of adolescent parents have been tried over the past few years.

CETA

In 1980, under the youth titles of the Comprehensive Employment and Training Act (CETA), the Department of Labor set up demonstration projects at 17 sites across the country to test the efficacy of guaranteed part-time work during the school year and full-time work during summers for increasing school retention among adolescents aged 16 to 19, whose families were below poverty level (USDOL, 1980). Based on surveys which showed that one out of every six eligible youths had at least one child, several of the demonstration programs included child care as part of the comprehensive services provided to adolescent parents (MDRC, 1980). The Baltimore project, for example, offered two types of child care: center-based day care, which included early childhood and parenting education for the young parents; and family day care which trained unemployed adults to be licensed home day care providers. Unfortunately, no evaluation of the impact of child care services on the young parents' continuation in school or their employment participation has been published to date.

Project Redirection

Project Redirection (1981, 1982, 1985), a national demonstration project operating through established community-based organizations in four cities, provides and coordinates a large range of services for welfare eligible pregnant and parenting adolescents who have not completed high school. The

participating sites generally have chosen to deliver the majority of services, including child care, through referral networks.

Although child care was identified as an unmet need by the majority of respondents at baseline, the maternal grandmother remained the primary source of child care at baseline and follow-up at 12 and 24 months. At baseline only 15 percent of the young mothers used some type of formal day care while attending school. While this percentage remained fairly stable over the twenty-four month period for the comparison group, it is interesting that among Project Redirection participants the rate increased to 25 percent at 12 months and 26 percent at 24 months**, indicating a decline in the availability and/or willingness of family members to provide long term child care and suggesting that the sites were finding sources of child care outside the home for their clients.

In view of the increased utilization of out of home care it is somewhat surprising that at 12 months Redirection participants rated child care the least helpful of the ten service components provided by the program. At the 12 month follow-up, the large majority of young mothers (91 percent) felt that their child care arrangements met their needs and only one in five expressed a desire for change towards more formal paid child care. Among adolescents who had not used or expressed an interest in formal child care arrangements, some indicated concerns about the cost, but the most common response (31 percent) was that they were unwilling to leave their baby because of their distrust of strangers. Approximately one-third of both Project Redirection and comparison

**This finding is consistent with an earlier study by Klerman and Jekel (1973). At three months postpartum, 21% of the young mothers were paying someone to care for the baby and by 15 months the percentage paying for child care increased to 33%.

site clients indicated that they had missed school for child care reasons, although the majority (76 percent) had missed fewer than five days for this reason. This is consistent with the baseline findings which indicate that few respondents had secure fallback arrangements when their regular child care did not work out.

In the final interview at 24 months, 86 percent of the respondents reported that their current arrangements met their child care needs, and a similar percentage stated that they had no problems with their existing child care. Among those expressing dissatisfaction, nearly half (43 percent) were concerned about the unreliability of care; an additional 28 percent said that no baby sitter was available. Consistent with the 12 month outcomes, approximately one-third (30 percent) experimental: 34 percent comparison teens) acknowledged that they had missed school or work because of child care problems, but those absences were reportedly infrequent.

The importance of child care availability in terms of influencing teen parents' participation in the labor force is underscored by the findings that among those teens who were not employed or looking for work at 24 months, 43 percent cite child care problems as the major reason for not being in the labor force. Significant differences were found between groups. Puerto Rican teens reported greater child care problems (65 percent) than Mexican American teens (45 percent) or white teens (35 percent). Black teens (27 percent) were the least likely to report child care difficulties as a reason for not being in the labor force.

School Programs

School programs, both inclusive curriculum models, and the integrated non-

curricular models* have become an increasingly important source of services to adolescent parents over the past 15 years. While all inclusive, (i.e. alternative) programs provide services during pregnancy, fewer provide services into the postpartum period for an extended period of time. Integrated (i.e. mainstream) programs are more likely to provide services after delivery. During the past few years an increasing number of integrated programs have added day care components.

Reports suggest that the introduction of day care is 1) associated with significant reductions in school drop-out and repeat pregnancy rates; 2) is cost effective in preventing future economic dependency; and 3) is socially effective in providing young mothers and their children with opportunities for the development of their full potential (Campbell, et al, 1986; Boston Globe, 1982; New Futures School, 1982; Edwards and Arnold, 1982; Zellman, 1981; Sung, 1981).

In a Boston Globe article (September 19, 1982) on three school-based programs, the Director of the Austin, Texas program stated that the lack of day care was the number one deterrent to returning to school for adolescent parents. She credited the introduction of day care at three public high schools with reducing the drop-out rate among adolescent parents from 60 to 15 percent, and the incidence of repeat births within one year to twenty percent of the national average.**

*This three-way classification of school programs comes from a Rand Corporation study of school programs (Zellman, 1981). The inclusive models provide education and other services in a separate environment. Integrated programs provide course work relating to pregnancy and parenting and/or services in the regular school setting.

**National figures cited for comparison are from Trussell and Menken (1978). According to these figures 44 percent of adolescents have subsequent births in one year; 70 percent within two years.

The New Futures School (1982) in Albuquerque, New Mexico has provided on-site child care since 1974 for the children of young mothers attending school or involved in a work experience program. A 1981 follow-up study of students who participated in this inclusive program during the past six years showed that almost all participants (82 percent) graduated high school or obtained a General Equivalency Diploma and 31 percent of these graduated obtained some post-secondary education or training.*** According to the Director, the provision of child care was responsible not only for the impressive school completion rates, but also for keeping the repeat pregnancy rate down to one-third of the national average (Boston Globe, 1982).****

St. Paul's Maternal and Infant Care Project has provided multi-disciplinary medical, educational, and counseling services to adolescent mothers and their infants in the public schools since 1973 (Edwards and Arnold, 1982), and on-site day care services since 1975. The Project currently operates in four public high schools and reports an 87 percent school retention rate after

It should be remembered that prior research has shown that among single black women school attendance or graduation delays subsequent pregnancies (Furstenberg, 1976; Klerman and Jekel, 1973). Trussell and Menken (1978) found a similar relationship between completed years of schooling and the pace of subsequent fertility. Darabai et al (1983) in a New York study of black and Hispanic women who were adolescents when they delivered their first child found that the probability of a second pregnancy and birth within 30 months of the first was significantly associated with living arrangements (with husband or boyfriend) and school return after the first birth.

***These figures are particularly impressive when the high level of previous school drop-out (36% overall) in this program is taken into consideration. Furstenberg has estimated that although 75 percent of adolescent parents return to school after delivery, no more than 50 percent graduated (Furstenberg, 1976, 1980, 1981).

****The New Futures School follow-up study found that 5 percent of its enrollees had repeat pregnancies by one year postpartum; 16 percent by 2 years. The national figures cited (source unknown) for comparison are: 18 to 25 percent of adolescent mothers have repeat pregnancies within one year; 30 to 50 percent at two years.

delivery and a two year repeat pregnancy rate of less than two percent among young mothers continuing their education. The success of the program is credited to two factors, 1) the project's integrated approach to service delivery; and 2) services which are offered in an accessible and acceptable environment geared to the adolescent's needs.

Sung (1981) reported on a Kalamazoo, Michigan inclusive school program for pregnant and parenting adolescents which provided child care as one of its four components. This program has been in operation for over 13 years and was the model used for the 1979 Michigan state plan for comprehensive services for young parents and their children. Several unique features distinguish it from other school based programs. While the majority of school based programs provide child care as a supplemental service necessary for the successful provision of the core services (education, health and social services), the Michigan program views day care as the core service. The other services in this approach are seen as providing supplementary support and maintenance assistance for the young parent in their child-rearing responsibilities.

Another unique feature of the program is a special newborn unit which serves infants between the ages of 14 days and six months. This unit provides a half-day program which keeps the young mother and infant together. A teacher is sent to the unit to give the student individualized instruction and the child care worker supports the development of a positive bond between mother and infant and the acquisition of developmental parenting skills. The child care worker determines when it is appropriate to separate the mother and child for part of the school day. As is true for other programs, the unit is also used by pregnant adolescents as a laboratory for developing parenting skills.

The Kalamazoo program enrolls an extremely high percentage (78 percent) of young women who had dropped out of school prior to or during pregnancy or after delivery. Fifty percent of those enrolled had one or more children at enrollment; the remainder were pregnant. Among the mothers enrolled during pregnancy, 80 percent returned to school postpartum. However, the program reported that the subsequent drop-out rate among all groups was 40 percent. No breakdown by prior school or pregnancy status was provided, making it difficult to ascertain the program's retention rates among the various groups. The program reported success in reducing the number of child abuse and neglect cases, increasing the rate of high school completion among former school drop-outs, and decreasing the incidence of repeat pregnancies among its students.

The Family Learning Center (FLC) in Leslie, Michigan (Children's Defense Fund, 1987), which began in 1975, provides comprehensive care for teen parents and their children from seven rural school districts. Located on the grounds of Leslie High School in two mobile units, this day care program serves 26 children of teen parents from age two and a half weeks to six years, approximately 30 percent of the area's pregnant students. It is not unusual to find children staying for three to four years, thus providing important continuity in the care of participants' children. In addition to providing parenting education for the teen mothers, FLC requires that the family members of students enrolled in the program take four academic courses for which they receive high school credits. This unusual requirement, which involves fathers, grandparents, boyfriends and other members of the extended family is a reflection of FLC's larger goal of improving the quality of intergenerational life.

The FLC approach has been very successful in terms of the outcomes of both teen mothers and their children. In 1985, 91 percent of pregnant and parenting seniors graduated; 97 percent of pregnant and parenting eighth to eleventh graders stayed in school. According to an evaluation, teen parents participating in the program increased their grade point averages, showed improved attitudes and behavior, greater confidence in their abilities and higher self-esteem. Over the past three years, infants born to FLC students have had a lower than average medical complication rate, and higher birth weights. During the three year period, only two subsequent pregnancies occurred among single teen mothers and three to married mothers. The children of teen parents demonstrated marked improvements in their socialization, motor and verbal skills. These positive outcomes resulted in FLC's designation as one of Michigan's model sites for comprehensive care for teen parents and their children. FLC was also recently selected as one of The Ford Foundation's National Innovations in State and Local Government Awards Programs, which will permit FLC to double the number of children served in the 1987-1988 academic year.

Further documentation of the positive benefits of providing educational day care services to the children of single teenage mothers from before three months of age until the child entered public kindergarten is documented by Campbell, et al (1986). Data from one of the few truly experimental longitudinal studies indicates that mothers who had free access to high quality day care for their children increased their likelihood of completing high school, obtaining post-secondary training and becoming self-supporting and reduced their likelihood of experiencing subsequent births. The children of teen mothers benefitted from the day care program as well, demonstrating

higher mental test scores than the children in the comparison group. Although both the experimental and control groups had access to similar community resources, educational programs and health care, the authors of the study suggest that several factors may have contributed to the higher success rates of those receiving program services including: active outreach to participants by social service and health care facilities; provision of day care from infancy on without cost; on-site health care; free and dependable transportation to program services. These findings indicate that educational day care delivered in an accessible, acceptable and affordable manner is a source of developmental support both for teen mothers and their children. According to Campbell, et al, a good child care program can make the difference between success or failure for single teenage mothers.

Another longitudinal follow-up study of an early intervention program conducted by Syracuse University (Honig, et al, 1986) found that early intervention did not appear to affect the school competence of program children during their elementary and early junior high school years, but did significantly affect the academic and attitudinal behavior of program girls in the later junior high years. The program provided half-day care, five days a week from age six months to 15 months and full-day care from 15 months to 60 months of age plus home visiting and assistance with parenting behavior, family relations and employment and community functioning. Eighty-two children were enrolled in the program from families which included low income, teen mothers with less than high school education and no work history or a history of unskilled or semi-skilled work. The program group was carefully matched with a comparison group on socioeconomic, maternal age, and birth order variables.

Data available on 64 of the 82 program children and 46 control children at 13 to 16 years of age indicated that program girls appear to do significantly better in the late junior high years academically, developed more positive attitudes towards themselves and other people and had better control of their impulses. Although program boys did not show similar positive outcomes, both boys and girls did show significantly less juvenile delinquency behavior (measured by supervision of the county probation department) between ages 13 to 16 than control group adolescents. The cost savings to society were considerable. Costs per program group child (n=65) was \$186; for control group child (N=54) \$1,985. These findings correspond to earlier findings from the Perry Preschool Project.

Taken together these national, local and program studies substantiate both the need for and efficacy of child care as a support service which can improve the life outcomes of both the adolescent mother and her child. What is obvious from the program studies cited above is that no one program model works best for all populations of teen parents. The common thread that binds successful programs is their agreement on the necessary components for comprehensive service delivery. Whether these programs offer services directly or through networking and referral, each successful program model concentrates on education, employment, health and fertility control, and parenting and child development, areas which have been identified as essential for the long-term goal of economic self-sufficiency and positive family outcomes for both mother and child. In each program the provision of day care is considered crucial for the successful provision of other services.

References

- AIR. The Ecology of Help Seeing Behavior Among Adolescent Parents. Final Report prepared for Administration for Children, Youth, and Families. Submitted January, 1979. American Institutes for Research, Cambridge, MA, 1979.
- Baldwin, W. and V.S. Cain. The Children of Teenage Parents. Family Planning Perspectives, 12:1, 1980. pp 34-43.
- Badger, E. Effects of Parent Education Programs on Teenage Parents and their Offspring. In K. G. Scott, et al., (eds.), Teenage Parents and their Offspring. New York, NY: Grune and Stratton, 1981.
- Boston Globe, High Schools, Teens and Babies. Boston, MA, September, 1980, p. B60.
- Broman, S. H. Long Term Development of Children Born to Teenagers. In Scott, Field and Robertson (eds.), Teenage Parents and their Offspring. New York, NY: Grune and Stratton, 1981.
- Brown, S.V. Teenage Pregnancy: Omissions in Research. Social Work, September, 1980, pp. 412-413.
- Campbell, F. A., Breitmayer, B. and Ramey, C. Disadvantaged Single Teen Mothers and their Children: Consequences of Free Educational Day Care. Family Relations, January, 1986, pp. 63-68.
- Card, J. J. and L.L. Wise. Teenage Mothers and Teenage Fathers: The impact of Early Childbearing on the Parents' Personal and Professional Lives. Family Planning Perspectives, 1978, 10 (4), pp. 199-205.
- Cartoof, V. Postpartum Services for Adolescent Mothers. Child Welfare, 57 (10), 1978, pp.666-666.
- _____. Postpartum Services for Adolescent Mothers: Part 2. Child Welfare, 58 (10), 1979, pp. 673-680.
- Childrens' Defense Fund. Child Care: An Essential Service for Teen Parents. Washington, D.C.:March, 1987.
- Clapp, D.F. and R.S. Raab. Follow-up of Unmarried Adolescent Mothers. Social Work, March, 1978, pp. 149-153.
- Colletta, N.D., et al. When Adolescent Mothers Return to School, Journal of School Health, November, 1980, pp. 534-538.
- _____. and C. H. Greg. Adolescent Mothers Vulnerability to Stress, Journal of Nervous and Mental Disease, 1981, 169:1, pp. 50-54.

Darabi, K. et al. The Second Time Around: Birth Spacing Among Teenage Mothers. In Stuart & Wells (eds.) Pregnancy in Adolescence: Needs, Problems, and Management, New York, NY: Van Nostrand Reinhold, 1982.

Edwards, L.E., and K.A. Arnold. Adolescent Pregnancy Prevention Services in High School Clinics: An Update. Unpublished report. St. Paul Maternal and Infant Care Project, St. Paul, MN, 1982.

Family Impact Seminar - Alliance for Young Families. The Social Consequences of Teenage Pregnancy. Final Report, Boston Field Site. Boston, MA, September 30, 1980.

Field, T. Early Development of the Preterm Offspring of Teenage Mothers. In K.G. Scott, et al., (eds.), Teenage Parents and Their Offspring, New York, NY: Grune and Stratton, 1981.

Furstenberg, F.F. Jr. Unplanned Parenthood: The Social Consequences of Teenage Childbearing. New York, NY: The Free Press, 1976.

_____. Burdens and Benefits: The Impact of Early Childbearing on the Family, Journal of Social Issues, 1980, 36 (1), pp. 64-87.

_____. and A. G. Crawford. Family Support: Helping Teenage Mothers to Cope. In F.F. Furstenberg, et al., (eds.), Teenage Sexuality, Pregnancy and Childbearing, Philadelphia, PA: University of Pennsylvania Press, 1981.

Goldstein, H. and H. M. Wallace. Services for and Needs of Pregnant Teenagers in Large Cities of the United States, 1976. Public Health Reports, 1978, 93, pp. 46-54.

Hardy, J. B., T.M. King, D.A. Shipp, and D.W. Welcher. A Comprehensive Approach to Adolescent Pregnancy. In K.G. Scott, et al., (eds.), Teenage Parents and their Offspring. New York, NY: Grune and Stratton, 1981.

Henderson, G.H. Consequences of School-Age Pregnancy and Motherhood. Family Relations, April, 1980, pp. 185-190.

Hoffreth, S. The Children of Teen Childbearers. In Hoffreth, and Hayes, (eds.) Risking the Future: Adolescent Sexuality, Pregnancy and Childbearing. Washington, DC: National Academy Press, 1987.

Honig, L., D. Wittmer, R. Lally and P. Mangione. An Early Intervention Program 10 Years Later: What Happened to High Risk Infants Who Received Quality Early Childhood Education: The Syracuse University Study. Presented at NAEYC Conference, Washington, D.C., November 15, 1986.

Jekel, J. F., and Klerman, L. V. Comprehensive Service Programs for Pregnant and Parenting Adolescents. In E.R. McAnarney (ed.), Premature Adolescent Pregnancy and Parenthood, New York, NY: Grune and Stratton.

Kinard, M.E., and L.V. Klerman. Effects of Early Parenthood on the Cognitive

Development of Children. In E.R. McAnarney (ed.), Premature Adolescent Pregnancy and Parenthood, New York, NY: Grune and Stratton, 1983.

Klerman, L.V. Evaluating Service Programs for School-Age Parents. Journal of Evaluation and the Health Professions, 1979, 2 (1), pp. 55-70.

_____. Family Home Care: Critical Issues for Services and Policies, New York, NY: Haworth Press, 1983.

_____. Programs for Pregnant Adolescents and Young Parents: Their Development and Assessment. In K.G. Scott, et al., (eds.), Teenage Parents and Their Offspring. New York, NY: Grune and Stratton, 1981.

_____ and J.F. Jekel. School-Age Mothers: Problems, Programs and Policy. Hamden, CT: Shoe String Press, 1973.

McGee, E.A. Too Little, Too Late: Service for Teenage Parents. A Report to the Ford Foundation, New York, NY, 1982.

MDRC. Schooling and Work Among Youth from Low Income Households: A Baseline Report from the Entitlement Demonstration. Manpower Demonstration Research Corporation, New York, NY, 1979.

_____. Early Impacts from the Youth Entitlement Demonstration: Participation and Work. Manpower Demonstration Research Corporation, New York, NY, 1980.

Moore, K.A. Government Policies Related to Teenage Family Formation and Functioning: An Inventory. In T. Ooms (ed.), Teenage Pregnancy in a Family Context: Implications for Policy. Philadelphia, PA: Temple University Press, 1981a.

_____, S.L. Hofferth, R.F. Wertheimer, L.J. Waite, and S.B. Caldwell. Teenage Childbearing: Consequences for Women, Families, and Government Welfare Expenditures. In K.G. Scott, T. Field, and E.G. Robertson (eds.), Teenage Parents and Their Offspring. New York, NY: Grune and Stratton, 1981b.

New Futures School. Summary of Data from Follow-up Study of New Futures Clients. Unpublished report, Albuquerque, NM: 1982.

OAPP. Final Report on the Survey of Services Provided by Adolescent Pregnancy Projects, submitted to the Office of Adolescent Pregnancy Programs. J.R.B. Associates, Mclean, VA, August 15, 1981.

Presser, H.B. Social Consequences of Teenage Childbearing. Social Demography: The State of the Art. Cambridge, MA: Harvard University Press, 1977.

_____. The Social and Demographic Consequences of Teenage Childbearing for Urban Women. Prepared for National Institute of Child Health and Human

Development, Center for Population Research. Submitted August, 1979.
National Technical Information Service, Springfield, VA.

Project Redirection: Interim Report on Program Implementation. Man-Power
Demonstration Research Corporation, August, 1981.

_____. Site News. Manpower Demonstration Research Corporation, October,
1982.

_____. Levy, S.B. with W. Grinker. Choices and Life Circumstances: An
Ethnographic Study of Pregnant and Parenting Teens in Project Redirection.
Manpower Demonstration Research Corporation, 1983.

_____. Needs and Characteristics of Pregnant and Parenting Teens: The
baseline Report on Project Redirection, Manpower Demonstration Research
Corporation, 1982.

_____. Early Impacts of the Project Redirection Program on Pregnant and
Parenting Teens, Manpower Demonstration Research Corporation, 1983.

_____. Final Impacts From Project Redirection: A Program for Pregnant and
Parenting Teens, Manpower Demonstration Research Corporation, 1985.

Sung, K. The Role of Day Care for Teenage Mothers in a Public School. Child
Care Quarterly, 10 (2), 1981, pp. 113-124.

Trussel, J. and J. Menken. Early Childbearing and Subsequent Fertility.
Family Planning Perspectives, 10: July-August, 1978, pp. 209-218.

USDOL. Improving Services to Young Parents through CETA. U.S. Department of
Labor, Employment and Training Administration. Report prepared by National
Association of Counties Research, Inc., U.S. Government Printing Office,
Washington, DC: 1980.

Wallace, H.M. et al., Services for and Needs of Pregnant Teenagers and their
Infants in the Large Cities of the United States, 1979-1980. Division of
Maternal and Child Health, School of Public Health, San Diego, CA: October,
1982.

Weiner, R., Impact on the Schools: Teen Pregnancy. A Special Report From the
Education Research Group. Washington, D.C.: Capitol Publications, 1987.

Zellman, G.L. The Response of the Schools to Teenage Pregnancy and
Parenthood. Santa Monica, CA: Rand Corporation, 1981.

Zuckerman, B., Walker, D.K., Frank, D., Chase, C., Hamberg, B. Adolescent
Pregnancy: Biobehavioral Determinants of Outcome. Journal of Pediatrics,
105 (6), 1984, pp. 857-863.